8/11/82

(TOX 3H) DATA EVALUATION RECORD PAGE 1 OF 3

CASE GS0292 NALED PM 11 ~~12/22/81~~

CHEM 035401 Naled (1,2-dibromo-2,2-dichloroethyl d

BRANCH EEB DISC 55 TOPIC 515[illegible]45

FORMULATION 12 - EMULSIFIABLE CONCENTRATE (EC OR E)

FICHE/MASTER ID 00037799 CONTENT CAT 01

Johansen, C. (1961) Bee Poisoning Investigations, 1961: Report No. 8577. (Unpublished study received Mar 26, 1975 under 3125-EX-119; prepared by Washington State Univ., submitted by Mobay Chemical Corp., Kansas City, Mo.; CDL:094390-I)

SUBST. CLASS = S.

DIRECT RVW TIME = (MH) START-DATE 8/3/82 END DATE 8/3/82

REVIEWED BY: Allen W. Vaughan
TITLE: Entomologist
ORG: EEB/HED
LOC/TEL: Crystal Mall / 79307

SIGNATURE: Allen W. Vaughan DATE: 8/11/82

APPROVED BY:
TITLE:
ORG:
LOC/TEL:

SIGNATURE: DATE:

1. Chemical: Dibrom (naled)

2. Formulation: 20% WP, 8 lb/gal E

3. Citation: Johansen, C. 1961. Bee poisoning investigations, 1961. Report No. 8577. (Unpublished study rec'd. Mar. 26, 1975 under 3125-EX-119; prepared by Wash. St. Univ., subm. by Mobay Chemical Corp., Kansas City, Mo.; CDL: 094390 - I) FICHE/MASTER ID 00037799.

4. Reviewer: Allen W. Vaughan
Entomologist
EEB/HED

5. Date Reviewed: August 3, 1982

6. Test Type: Toxicity to bees

A. Test species: Honey bee

(Apis mellifera)

7. Reported Results: Dibrom is highly toxic to bees, but residual toxicity is short-lived (less than 24 hr.) Dibrom WP has a greater residual toxicity than the E formulation.

8. Reviewer's Conclusions: This study is scientifically sound, and shows naled to be highly toxic to honey bees, but with a short - lived residual toxicity.

OF

Materials and Methods

Test Procedures

Treatments were made by hand to small plots of alfalfa. Cages of bees were placed in the plots prior to treatment. At intervals after treatment, foliage samples from each plot were placed in cages and the cages were loaded with bees. Bee were checked for mortality after 24 hours.

Statistical Analysis

None reported.

Discussion/Results

At 1 lb AI/A, both dibrom formulations caused 100% mortality of bees treated during application. All bees were dead within 30 minutes. Three hour residues of the WP formulation (1 lb AI/A) caused 100% mortality, while residues of the E formulation (same time and rate) caused 59% mortality. 24-hr. residues were not toxic to honey bees.

Reviewer's Evaluation

A. Test Procedures

Procedures were sound.

B. Statistical Analysis

None reported

C. Discussion/Results

This study is scientifically sound